



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,820	01/16/2004	Joseph Lee Haughawout	81230.68US3	6587
34018	7590	07/29/2005	EXAMINER	
GREENBERG TRAURIG, LLP 77 WEST WACKER DRIVE SUITE 2500 CHICAGO, IL 60601-1732				YANG, CLARA I
ART UNIT		PAPER NUMBER		
				2635

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/758,820	HAUGHAWOUT ET AL.	
	Examiner	Art Unit	
	Clara Yang	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 May 2005.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-14, 29-40, 44 and 45 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-14, 29-40 and 44-45 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 16 January 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 23 May 2005 disclaiming the terminal portion of any patent granted on this application that would extend beyond the expiration date of US 6,642,852 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Response to Arguments

2. Applicant's arguments with respect to claims 1 and 29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 43 and 44 have been renumbered 44 and 45 respectively.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 3, 5, 6, 8-10, 12-14, 29, 31, 33, 34, 36-38, 40, and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamon et al. (US 5,726,645) in view of Ivie (US 5,815,086).

Referring to claims 1, 29, 44, and 45, claim 29 calls for a control device that is substantially similar to the one claimed in claim 1. As shown in Fig. 6, Kamon teaches a remote control system comprising: (a) operation detecting circuit 10 (i.e., a power monitor) associated with appliance 20, wherein operation detecting circuit 10 has circuitry for determining appliance 20's current power state and transmission portion 10b (i.e., first wireless communication module) for transmitting information to a remote controller (see Col. 4, lines 65-67 and Col. 5, lines 1-3 and 9-22); (b) a remote controller having (1) preset data of command codes (i.e., library of command code sets) employing various formats and code systems associated with respective electronic devices categorized according to the manufacturers and types thereof, (2) light emitting portion 1 (i.e., a second wireless communication module) for transmitting a command code to appliance 20, and (3) receiving portion 11 (i.e., a third wireless communication module) for receiving a signal from operation detecting circuit 10 (see Figs. 4 and 5; Col. 3, lines 42-47; Col. 4, lines 34-54 and 65-67; and Col. 5, lines 1-3 and 37-40); and (c) wherein the remote controller has setup mode programming (see Fig. 7) that includes the steps of (1) light emitting portion 1 transmitting a command code from a command signal group to

appliance 20 at S104, (2) receiving portion 11 receiving a signal from operation detecting circuit 10 that indicates that the transmitted command code caused a change in appliance 20's current power state at S105, and (3) control portion 4 selecting and storing the command code set that includes the command code to which appliance 20 responded by changing power state at S109 (see Col. 5, lines 37-40; Col. 6, lines 36-67; and Col. 7, lines 39-47). Regarding claim 29, Kamon's light emitting portion 1 and receiving portion 11 form a second wireless module. Kamon's operation detecting circuit 10 determines appliance 20's current power state by monitoring the appliance's headphone jack for a signal input instead of monitoring the power supplied to (as called for in claims 1 and 29) or current flow to appliance 20 (as called for in claims 43 and 44).

In an analogous art, Ivie teaches a remote control system, as shown in Fig. 1, comprising:

- (a) single universal transmitter 106, which is associated with appliance 10, having a current monitor for monitoring power supplied to appliance 10 to thereby determine appliance 10's present power state and a first wireless communication module formed by infrared (IR) modulator 114 and IR emitter 116 (see Fig. 2; Col. 5, lines 60-67; and Col. 6, lines 1-10 and 39-52); and
- (b) hand-held transmitter 230 having a library of command code sets and a second wireless communication module provided by IR emitter 232 (see Col. 10, lines 25-26 and 34-43).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kamon's operation detecting circuit 10 as taught by Ivie because a current monitor effectively determines whether an appliance is in a "power on" state or in a "power off" state (see Ivie, Col. 6, lines 39-67 and Col. 7, lines 1-14) and enables headphone plug 10a of Kamon's appliance 20 to be free for its intended use instead of being used as a power monitor.

Regarding claims 3 and 31, Kamon teaches that the remote controller has a power supply key (PW key 2a) for turning a power supply on and off (see Col. 3, lines 58-59). Kamon adds that the power supply of appliance 20 is turned on or off depending on its previous state in response to the power supply on/off switching command signals (see Col. 5, lines 63067 and Col. 1, lines 1-2); hence Kamon's command codes directly affect the power state of an appliance.

Regarding claims 5, 9, 33, and 37, per Kamon, after it determines that the SET key 2c has been pushed at S101 (as called for in claims 9 and 37), the remote controller automatically transmits a command code from each command signal group until receiving a signal from operation detecting circuit 10 (see Fig. 7, S106, S107, and S108 and Col. 7, lines 1-13 and 59-67), as called for in claims 5, 9, 33, and 37.

Regarding claims 6, 10, 34, and 38, Kamon expresses that the remote controller has a read-only memory ROM 7 for storing a plurality of command signal groups employing various formats associated with respective electronic appliances categorized according to manufacturers and types thereof (see Col. 4, lines 34-38); thus each command signal group commands one type of appliance.

Regarding claims 8, 12, 36, and 40, Kamon teaches that the command signal groups are arranged in outputting order that is determined in accordance with the degrees of spread (i.e., popularity) of the appliances (see Fig. 3 and Col. 5, lines 52-62).

Regarding claim 13, Kamon teaches that operation detecting circuit 10's transmission portion 10b transmits its signal by means of electric wave (i.e., radio frequency) or IR rays and that the remote controller's receiving portion 11 (i.e., third communication module) receives the signal (see Col. 4, lines 65-67 and Col. 5, lines 1-7 and 18-22).

Regarding claim 14, Kamon's remote controller has a light-emitting portion 1 (i.e., a second wireless communication module that is an IR communication module) for transmitting a command code to appliance 20 (see Fig. 4 and Col. 4, lines 11-15).

7. Claims 2 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamon et al. (US 5,726,645) in view of Ivie (US 5,815,086) as applied to claims 1 and 29 above, and further in view of Nakazawa et al. (US 6,297,746).

Regarding claims 2 and 30, Kamon and Ivie fail to teach that operation detecting circuit 10's signal includes the operation detecting circuit 10's address in addition to appliance 20's current power state.

In an analogous art, Nakazawa teaches a centralized apparatus control system, as shown in Fig. 1, comprising: (a) a plurality of terminals 200, wherein each terminal 200 (i.e., power monitor) is associated with an electrical apparatus (such as a television set, videocassette recorder, etc.) and has microcomputer 30 for determining the current power state of its associated apparatus and radio transmitter-receiver 32 (i.e., a first wireless communication module) for transmitting the current power state of the apparatus (see Fig. 4; Col. 10, lines 41-51; and Col. 11, lines 2-15); and (b) host unit 100 (i.e., control device) having EEPROM 18 for storing a library of command code sets for each apparatus that is provided with an expanded function (see Col. 22, lines 24-34 and 48-55; and Col. 23, lines 10-28) and radio transmitter-receiver 20, which has a transmitter (i.e., a second wireless communication module) for transmitting a command code to an apparatus via terminal 200 and a receiver (i.e., a third wireless communication module for receiving a signal indicating the current power state of an apparatus from terminal 200 (see Fig. 2; Col. 9, lines 36-39 and 47-67; Col. 10, lines 26-29; and

Col. 11, lines 7-15). Per Nakazawa, terminal 200 transmits its identification (ID) code along with the current power state of its associated apparatus to host unit 100 (see Col. 11, lines 7-15).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system and method of Kamon and Ivie as taught by Nakazawa because an operation detecting circuit 10 that transmits its address in addition to appliance 20's current power state enables the remote controller to (1) verify that the transmitted command code caused the desired appliance 20's power state instead of another appliance's power state to change and (2) easily identify any operation detecting circuits 10 that have malfunctioned (see Nakazawa, Col. 3, lines 49-54).

8. Claims 4 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamon et al. (US 5,726,645) in view of Ivie (US 5,815,086) as applied to claims 1 and 29 above, and further in view of Yamamoto (US 5,097,249).

Regarding claims 4 and 32, Kamon and Ivie are silent on the remote controller transmitting a command code that indirectly affects a power state of the appliance.

In an analogous art, Yamamoto teaches a power status detecting apparatus. As shown in Fig. 1, Yamamoto's system comprises: (a) power status detecting apparatus 11 and power table tap 9 forming a power monitor and having circuitry for determining a current power state of an appliance and receiving portion 11A (i.e., a first wireless communication module) (see Fig. 3; Col. 3, lines 19-25 and 41-60; and Col. 4, lines 6-22); and (b) system control apparatus 12 having a library of command code sets, transmitting portion 13 (i.e., second wireless communication module) for transmitting a command code to an apparatus, and a communication module for receiving communication from power status detecting apparatus 11 (see Col. 3, lines 40-43; Col. 5, lines 63-68; and Col. 6, lines 1-6). Yamamoto teaches transmitting

command codes that indirectly affect the power state of an apparatus (see Col. 1, lines 42-53). In one example, Yamamoto discloses that when a command code for changing over the input of main amplifier 6 to the CD player is transmitted to selector 5, system control apparatus 12 transmits a command code to television tuner 2 via transmitting portion 13 to turn off if system control apparatus 12 detects that television tuner 2 is in the ON state (see Col. 5, lines 63-68 and Col. 6, lines 1-6). Other examples are found in Col. 8, lines 42-61 and Col. 9, lines 1-8.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system and method of Kamon and Ivie as taught by Yamamoto because a remote controller transmitting a command code that indirectly affects a power state of an appliance ensures that all necessary system components are turned on while the unnecessary components are turned off when a user selects a particular function/operation on the remote controller (see Yamamoto, Col. 1, lines 42-53).

9. Claims 7, 11, 35, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamon et al. (US 5,726,645) in view of Ivie (US 5,815,086) as applied to claims 1 and 29 above, and further in view of Chiloyan et al. (US 6,008,735).

Regarding claims 7, 11, 35, and 39, Kamon and Ivie fail to teach that the user is able to designate the appliance's type.

In an analogous art, Chiloyan's method and system for programming a remote control unit. Chiloyan's system includes a remote control unit having: (a) database 16 (i.e., library of command code sets) of code sets associated with various types and brands of devices (see Col. 4, lines 29-32); and (b) transmitter 18 (i.e., a wireless communication module) for transmitting signals from the remote control unit to a receiver 30 associated with one of a plurality of controllable devices 28a (see Fig. 1 and Col. 4, lines 40-48). As shown in Figs. 3A-3M and Fig. 5,

Chiloyan's method includes the step of a user selecting device type and brand at steps 105 and 110 respectively (see Figs. 3C and 3D; Col. 6, lines 33-56 and Col. 10, lines 25-31).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system and method of Kamon and Ivie as taught by Chiloyan because a remote controller having menus of available device types and brands provides a user the option to manually identify the correct code set for a device while minimizing/eliminating the need for the user to use an instruction manual and the occurrence of error in the set-up process (see Chiloyan, Col. 2, lines 3-6 and 16-20).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clara Yang whose telephone number is (571) 272-3062. The examiner can normally be reached on 8:30 AM - 7:00 PM, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CY
25 July 2005



BRIAN ZIMMERMAN
PRIMARY EXAMINER